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## REMARKS

In the application, Claims 3, 6-20 and 23 are pending and rejected. After due consideration of the Examiner's comments, the application has been amended as set forth above. In view of these amendments, Applicants submit that the application is now in a condition for allowance and requests that the Examiner issue a notice of allowance.

The Examiner maintains and reiterates his rejection of Claims 3, 6-20 and 23 under 35 U.S.C. §112, 1<sup>st</sup> para. as containing subject matter that was not described in such a way as to enable one skilled in the art to make and/or use the invention. In particular, the Examiner relies on the conclusion in the article by Stoeckert, et al. to support a position that gene expression profiles generated on microarrays are unpredictable. In the February 5, 2003 Office Action, the Examiner states that "even as late as the publication of [the Stoeckert et al.] reference in 2002 usage of gene expression profiles such as generated on microarrays are unpredictable and lacking in enablement due to [the need for] research 'yet to be realized' as to uses thereof."

Applicants respectfully reiterate their position that the Stoeckert, et al. article conclusion as to the unpredictability of gene expression data is derived from the object of the article in arguing for the need for "establishing common standards for describing microarray data, systems for data management and transfer, and public repositories for data storage and mining." (p. 469, 2<sup>nd</sup> ¶.) "The initiative [of the Microarray Gene Expression Data (MGED) Society] will maximize the value of microarray data by permitting greater opportunities for sharing information." (P. 269, 2<sup>nd</sup> ¶.)

The point sought to be made by the authors in Stoeckert, et al. is that, in order to share data between different research laboratories and to establish analogous public repositories for microarray data, standards for data representation and minimum information should be adopted. Stoeckert, et al. describe the problem encountered when microarray databases from various laboratory institutions are used to transfer data to and from microarray repositories such as ArrayExpress, CIBEX, and the Gene Expression Omnibus. It is difficult for laboratories that use these public repositories to transfer data because of differences in data type and database structure.

The Examiner's attention is directed to the frequent use of the word "standards", which appears 37 times in the article's title and text. Nowhere in the article do the authors state that gene expression data from microarrays is by its nature inconsistent, or that the data cannot be obtained. This article is all about *the need for standards* which would allow everyone to use everyone else's data, regardless of the techniques used to obtain the data. Standardization is not the goal of Applicants' invention, nor do they claim to have provided a solution. Thus, the standardization advocated by Stoeckert, et al, does not cast doubt on the ability to obtain useful and/or predictable information from microarrays.

The utility of gene expression data from microarrays both in 2002 and at the time the application was filed is evidenced in the attached Exhibits A-E. These exhibits are exemplary printouts from the Internet web site of the assignee of the present application, Gene Logic Inc., describing its experience in analyzing gene expression data. Gene Logic Inc. is in the business of selling databases consisting of gene expression data obtained from microarray analysis.

Exhibit A is a press release dated December 14, 1998 describing the expansion of a drug discovery collaboration between Gene Logic and Procter & Gamble. As stated in the release, the collaboration began in 1997, prior to the filing date of the application, for the use of Gene Logic's READS™ gene expression technology for building a database of differentially expressed genes. This technology is described in U.S. patents 5,712,126; 6,010,850; and 6,395,887, the applications for which were filed as early as 1995, and the first of which issued before the filing date of the application. Thus, the technology for use and analysis of the gene expression data was clearly enabled and had been disclosed to the public at the time the present application was filed.

Exhibit B is a press release dated September 27, 1999 that describes an agreement between Gene Logic and UCB Research, Inc. for development of a custom gene expression database using Gene Logic's READS™ technology and Affymetrix Inc.'s microarrays.

Exhibit C is a product description for Gene Logic's GeneExpress® BioExpress® Module, a proprietary database of gene expression data derived from thousands of microarray experiments. This product description has a copyright notice indicating publication in 2002.

Exhibit D is a press release dated December 22, 2000 announcing expansion of the collaboration agreement between Gene Logic and Procter & Gamble.

Finally, Exhibit E is a press release reporting Gene Logic's preliminary fourth-quarter and year-end 1998 results, showing revenues for 1998 of \$13.2M from collaborative agreements. The release also describes the GeneExpress® product line consisting of a set of gene expression databases.

If gene expression data obtained from microarrays were, as asserted by the Examiner, unpredictable and not enabled as late as 2002, it is extremely unlikely that pharmaceutical companies would have paid Gene Logic millions of dollars for development of and/or use of gene expression databases generated from microarrays, much less have expanded those collaborations after they had been in place for some time. The exhibits show that clearly that the technology for generating and analyzing gene expression data from microarrays was known in the prior art, and more than sufficiently predictable, at the time the application was filed.

Applicants' invention as claimed is directed to a method for displaying gene expression data. It has nothing to do with data compatibility among types of data and does not purport to solve the problem discussed in the Stoeckert, et al. paper because it does not address the problem. The claimed invention is a method that can be used by scientists to display gene expression data.

The Examiner rejects Claims 6 and 23 under 35 U.S.C. §103(a) as being unpatentable over Farr et al. take in view of In re Venner.

Applicants have cancelled the cited claims.

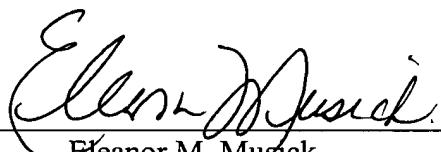
CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that all bases for rejection have been addressed and overcome such that the amended claims are allowable over the prior art. Accordingly, Applicants respectfully request that the Examiner withdraw all rejections set forth in the Office Action and issue a notice of allowance for all claims now in the application.

Should the Examiner decide to maintain the rejections notwithstanding Applicants' amendments and arguments, Applicants respectfully request that the amendments be entered to place the application in better condition for appeal. A Notice of Appeal is filed herewith.

Respectfully submitted,

By:



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Dated: March 19, 2004

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Docket No. 4002-US

## Gene Logic, Procter & Gamble Pharmaceuticals Expand Drug Discovery Collaboration

GAITHERSBURG, Md., and CINCINNATI - December 14, 1998 - Gene Logic Inc. (Nasdaq:GLGC) and Procter & Gamble Pharmaceuticals division of Procter & Gamble Company (NYSE:PG) announced today that they have expanded their drug discovery agreement to include additional therapeutic areas beyond the original focus on heart failure. The expansion will result in an approximate doubling of Gene Logic's annual revenues from the collaboration.

Under the terms of the expansion, P&G will pay Gene Logic annual fees for access to databases of gene expression information for the purpose of identifying new drug targets. Gene Logic will also receive milestone payments and royalties associated with development and marketing of any drugs resulting from the use of its data and technologies.

Initiated in 1997, the collaboration with P&G was Gene Logic's first. Under the original agreement, Gene Logic has been using its READSTM gene expression technology to build a database of genes differentially expressed between normal heart tissue and heart tissue from people with heart failure. Gene Logic and P&G are continuing to expand and mine this database to identify new drug targets for the development of novel drugs for the treatment of heart failure.

Under the expansion, Gene Logic will enlarge the P&G database to include new indications, beginning with osteoporosis. P&G has a long-standing interest in this condition, with one drug for osteoporosis on the market in Europe and others in development.

"P&G's decision is a strong confirmation of the power of the READS technology and Gene Logic's bioinformatics capabilities," said Michael J. Brennan, M.D., Ph.D., Gene Logic's President and Chief Executive Officer. "P&G became our first collaborator about one and half years ago, and now they have become the first to expand their relationship with us."

Said Gordon Hassing, Ph.D., Vice President, R&D, Rx Healthcare Products, of Procter & Gamble Pharmaceuticals: "We decided to expand our collaboration with Gene Logic because of the excellent progress we have made so far in the heart failure program. Heart failure is a difficult disease to study, and we are very impressed with Gene Logic's ability to discover potential new drug targets."

To date, Gene Logic has identified for P&G a number of genes that represent potential new drug targets for heart failure. The two companies are in the process of selecting and developing assays for these genes so that the genes may enter P&G's new drug screening program.

### READS in Drug Discovery

Each cell of the body carries copies of all of the approximately 100,000 human genes. But only about 10% of these genes are turned on, or expressed, in any given tissue. Differential display technology discloses which genes are turned on and the level at which each of these genes is expressed in various tissue samples.

One important use of READS is the identification of disease-associated genes by comparing gene expression between diseased and normal tissues. The differences between diseased and normal states reveal the subset of genes - usually less than 500 - most likely to play critical roles in a disease process. These genes, and the proteins they encode, become "targets" for drug therapy.

One of Gene Logic's key businesses involves the use of genomic analyses such as READS to provide new drug targets to pharmaceutical companies. These companies have a growing need for new targets to keep their R&D pipelines full.

Gene Logic combines genomics technologies and bioinformatics expertise to provide pharmaceutical companies with products designed to reduce the time, cost, and risk associated with drug discovery and development. These products include proprietary databases of gene expression for drug target discovery and development, a novel screening technology for identifying new drug leads, and a pharmacogenomics technology for stratifying patient populations to enhance drug effectiveness and minimize adverse effects. The company's Data Logic division, based in Berkeley, Calif., markets bioinformatics software for managing, analyzing, and integrating genomic data.

In addition to its agreement with P&G, Gene Logic has established alliances with American Home Products' Wyeth-Ayerst Research Division; N.V. Organon, the pharmaceutical unit of chemical manufacturer Akzo Nobel; Japan Tobacco's Pharmaceuticals Division; Rhône-Poulenc Rorer; Schering-Plough; Merck & Company; and Hoechst Schering AgrEvo, one of the world's largest agricultural products manufacturers. The Data Logic division has a collaborative agreement with SmithKline Beecham, under which it is installing its proprietary bioinformatics software to enable that

company to build proprietary genomics databases and integrate them with information from public databases.

This news release contains forward-looking information, including statements about the potential for revenue growth under the expanded agreement with P&G and about the ability to identify new drug targets. Actual results may differ materially because of a number of risk factors, such as the impact of competition, technological advances, and decisions made by P&G. These risks factors and others are more fully described in the company's Annual Report on Form 10-K for the year ending December 31, 1997, the Form S-4 filed in connection with the company's acquisition of Oncormed Inc., the most recent quarterly report on Form 10-Q, and other documents filed with the Securities and Exchange Commission.

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## Gene Logic and UCB Research Sign Gene Expression Database Agreement

### - Companies to Identify Novel Targets for Allergy and Asthma Therapeutics -

1999

GAITHERSBURG, Md., and CAMBRIDGE, Mass., Sept. 27 /PRNewswire/ -- Gene Logic Inc. (Nasdaq: GLGC) and UCB Research, Inc., a division of UCB Pharma, announced today that they have signed an agreement for the development of a custom gene expression database for the discovery of new drugs for asthma and allergies. Working through a joint research committee, the companies will also work together to evaluate potential therapeutic targets resulting from the collaboration.

Gene Logic will use its patented READST technology and Affymetrix Inc.'s (Nasdaq: AFFX) GeneChip® probe arrays to identify genes that are more or less active, or differentially expressed, in people with asthma and allergies than in normal individuals. Specifically, Gene Logic will apply these technologies to study gene expression profiles in mast cells, a critical component of allergic immune responses. UCB Research, which has pioneered the development of an innovative method for isolating and growing human mast cells, will contribute to the collaboration its expertise and findings from proprietary cell cultures.

"UCB is committed to developing innovative new therapies for major allergic diseases and respiratory disorders," said Thomas Beck, M.D., President and Director, Global Research of UCB Pharma. "We expect that Gene Logic's superior approach to target discovery, and our resulting custom database, will help enhance our ability to identify valuable new drug leads. This is a critical part of UCB's strategy to build our fundamental research capabilities through partnerships with leaders in the drug discovery industry."

"Gene Logic's proprietary approach to drug target discovery has already proven highly productive for our other pharmaceutical company partners," said Michael J. Brennan, M.D., Ph.D., Chief Executive Officer of Gene Logic. "We are pleased now to be working with UCB, a recognized world leader in the therapeutic areas of allergic and respiratory disease."

Global sales of UCB Pharma's Zyrtec® (cetirizine HCl) are expected to total over \$1 billion in 1999, making it one of the most successful once-a-day treatments for allergies worldwide.

### Discovery Collaboration Details

The combination of UCB's mast cell technology, Gene Logic's READS system and Affymetrix's GeneChip arrays provides a high-throughput system for developing expression profiles encompassing almost all genes expressed in tissues and cells relevant to asthma and allergy. Through the use of its bioinformatics software and the large reference data set contained in its GeneExpressT databases, Gene Logic will enable UCB researchers to determine which of these genes are most likely to be effective drug targets, or intended sites of drug activity.

Under terms of the agreement, UCB Research will pay Gene Logic research fees for development of the custom database. Gene Logic will also be entitled to payments for targets identified through use of the database, as well as royalties on any drugs developed from such targets. UCB Research will retain all rights to novel compounds that it discovers utilizing targets identified from the research collaboration. Further financial terms were not disclosed.

UCB Pharma is a global leader in the research, manufacture and marketing of innovative therapeutics for allergy, respiratory and central nervous system disorders. These products include Zyrtec® (cetirizine HCl), a leading antihistamine, and levetiracetam, an anti-epileptic drug for which UCB filed a New Drug Application (NDA) with the U.S. Food and Drug Administration in February 1999. UCB Group is a world scale company based in Brussels, Belgium, which is active in the pharma, chemical and film sectors. UCB's research activities seek to promote health, well being and quality of life. The company currently employs over 8,500 people worldwide, of which 550 are dedicated to advancing UCB's pharmaceutical research and development efforts. UCB Research, Inc., based in Cambridge, Ma., is a division of UCB Pharma. For more information, visit the company's web site at [www.ucb-group.com](http://www.ucb-group.com).

Based in Gaithersburg, Md., Gene Logic is a genomics and bioinformatics company that uses a variety of technologies to develop large reference databases and custom databases of gene expression information. These databases enable pharmaceutical and life science companies to accelerate the discovery and development of new drugs, diagnostics, and agricultural products. In its October 1999 issue, Bloomberg Personal Finance magazine ranked Gene Logic number 8 on its list of the 100 fastest-growing U.S. technology companies. In addition to UCB, Gene Logic's customers and collaborators include American Home Products Corp.'s Wyeth-Ayerst Research unit; Hoechst Schering AgrEvo GmbH, one of the world's largest agricultural product manufacturers; Japan Tobacco Inc.; Merck & Company

Inc.; NV Organon, a pharmaceutical unit of Akzo Nobel NV; Procter & Gamble Pharmaceuticals; Rhone-Poulenc Rorer Inc.; Schering-Plough Corp.; and SmithKline Beecham PLC. For more information about Gene Logic, visit the company's Web site at <http://www.genelogic.com> .

This press release contains forward-looking information, including statements about the utility of Gene Logic's technologies, discovery of drug targets, development of new drugs, and expected revenues from UCB. Such statements reflect management's current view of future events. Actual results may differ materially from these projections because of a number of factors, including risks associated with development of the company's technologies and competing technologies, the uncertainty of finding drug targets acceptable to UCB, and Gene Logic's dependence on UCB for development of any new drugs. There is no assurance that Gene Logic will collect any target-discovery fees or royalties. These risk factors and others are more fully described in Gene Logic's Form 10-K for 1998 and other documents filed with the Securities and Exchange Commission.

SOURCE Gene Logic Inc.; UCB Research, Inc.

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# BioExpress™

## GeneExpress® BioExpress™ Module

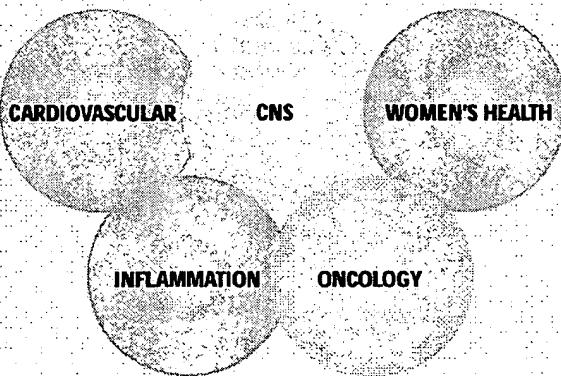
### Biology Redefined . . .

#### Identify, Prioritize and Validate Targets—Rapidly.

Identifying and targeting deregulated genes and pathways within diseased tissues is a major discovery effort that can lead to the development of effective diagnostics and therapies. Microarray technology allows tens of thousands of simultaneous gene expression measurements, expanding insight into the biological complexities of disease. Expression databases that span multiple disease indications offer synergies of scale for companies engaged in target discovery, prioritization and validation efforts. With BioExpress™, these companies can easily examine expression data across related diseases to uncover shared patterns of dysregulated gene expression.

Gene Logic's BioExpress™ Module is the leading proprietary database of gene expression-based information seamlessly integrated with comprehensive clinical and genomic annotations. The gene expression data is derived from thousands of microarray experiments from a diverse collection of diseased and normal tissues, mostly from human sources. Complementary animal and cellular models are included in the BioExpress™ Module to further validate newly discovered targets identified through differential gene expression analysis of human tissues. The module is packaged with a suite of software tools for in-depth data mining and analysis.

#### BioExpress™ Disease Programs



#### Enterprise-wide Advantages

- *Compare global gene expression profiles between diseased and control tissues.*
- *Reduce time, effort and expense of identifying novel drug targets and surrogate markers for diagnosis, progression and prognosis.*
- *Screen and prioritize novel and known therapeutic targets by analyzing their distribution patterns across diseased and normal tissues.*
- *Identify overlapping expression patterns that may indicate shared pathways across related diseases and expand the potential utility of drug targets and therapeutic agents.*
- *Identify and validate potential drug targets using a complementary approach that combines *in silico* analysis of human disease tissues and rodent disease models with *in vitro* human experimentation.*
- *Overlay extensive protein pathway and other genomic information across differential gene expression results to better understand the role that known genes and pathways play in complex diseases.*

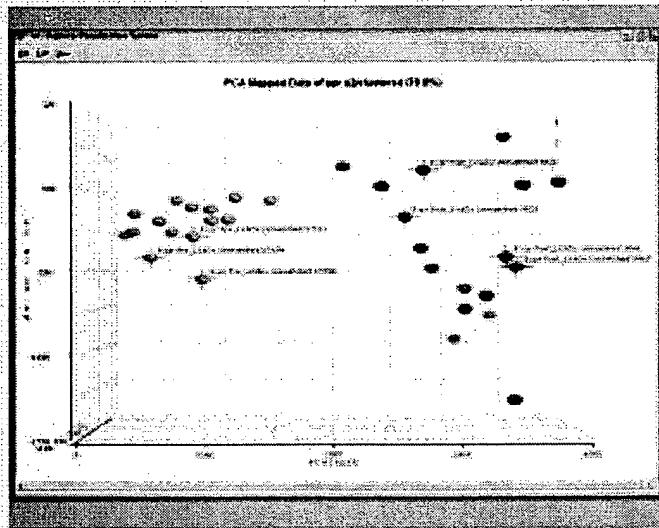
**GENE**  **LOGIC**

WHERE DISCOVERY BEGINS

## Software Tools for Precise, Customized Results

The BioExpress™ Module is enhanced by a sophisticated bioinformatic interface, the GeneExpress® Software System, a component of the Genesis Enterprise System™. It features powerful software tools that enable:

- Analysis and visualization of expression levels of genes and ESTs across diseased and normal tissues
- Visualization of expression results across signal transduction and metabolic pathway maps with links to more detailed information about specific genes of interest
- Seamless integration with additional tools for clustering, statistical analysis and graphic display, e.g. Partek Pro™ 2000, S+, Spotfire® Pro and GeneSpring™



**Figure 5.** Third-party software tools can be used to visualize and analyze data. In this example, discrimination between pre- and post-LVAD samples (obtained from donors with Left Ventricle Assistant Devices) was accomplished by exporting gene expression data into Partek Pro™ and performing Principal Component Analysis (PCA).

- Chromosome mapping tools for genes
- Access to curated information from, as well as links to, various databases such as BioCarta™, KEGG, Swiss-Prot, GenBank, Unigene, PubMed, HUGO, GeneCards and other public genomic resources

## Discover This.

To make data more affordable and accessible than ever before, Gene Logic offers the most comprehensive selection of gene expression information in a variety of configurations. Choose the entire GeneExpress® Suite or pick from our comprehensive solution sets:

- The GeneExpress® Suite—two distinct, yet integrated modules: BioExpress™ and ToxExpress™
- GeneExpress® DataSuites—single-subject databases
  - Oncology
  - Cardiovascular
  - Central Nervous System
  - Inflammation
  - Women's Health
  - Atlas Suite of Normal Tissues
- GeneExpress® CustomSuites—suites that incorporate your proprietary data with data from a GeneExpress® product
- GeneExpress® Reports—single gene view reports of expression across tissue samples

For more information about Gene Logic's gene expression solutions, including a demo, call 1-800-GENELOGIC, visit us at [www.genelogic.com](http://www.genelogic.com), or contact your Gene Logic representative.

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## Gene Logic Extends Collaboration with Procter & Gamble; P&G to subscribe to GeneExpress DataSuite

GAITHERSBURG, Md.--(BW HealthWire)--Dec. 22, 2000--Gene Logic Inc. (Nasdaq:GLGC), a leading provider of genomic information, announced today the expansion of their present collaboration with Procter & Gamble Pharmaceuticals focused on heart failure and osteoporosis. Financial terms were not disclosed.

Under terms of the agreement expansion, Gene Logic will gain access to a large number of well-characterized normal and diseased human heart tissue samples for inclusion in the GeneExpress(R) Suite. These samples will augment the ongoing comprehensive accumulation of gene expression information across the entire spectrum of human organs and human disease for the GeneExpress(R) Suite.

Also under terms of the agreement expansion, P&G will become a CustomSuite subscriber to the GeneExpress(R) Suite, which includes access to the Atlas DataSuite, a comprehensive assessment of normal gene expression across a broad survey of normal human tissue, enabling researchers to quickly access normal gene expression levels across the most relevant human organs and tissues.

Further, Gene Logic will construct for P&G a separate custom database that integrates their proprietary data together with the non-proprietary data from the GeneExpress(R).

The subscription agreement provides for broad deployment of both data sets in combination with Gene Logic's powerful GX2000TM data mining and analysis software tools across P&G's global research and development infrastructure.

"We expect that access to the GeneExpress(R) data in combination with our proprietary data will improve the speed and efficiency with which we identify and validate novel drug targets across our therapeutic focus areas," said Gordon Hassing, Vice President of R&D and Global Pharmaceuticals for P&G.

"We are pleased to expand our relationship with Procter & Gamble around this critical disease area," commented David S. Murray, Senior Vice President, Marketing and Sales for Gene Logic. "This is consistent with our ongoing strategy of integrating customers' data with the non-proprietary data contained in the GeneExpress(R) to improve the overall value and utility of our gene expression solution sets. In addition, the opportunity to acquire important clinical data regarding these critical disease areas will enhance our ability to deliver viable solutions for our pharmaceutical and biotechnology customers." Continuing, Murray said, "This collaboration extension is mutually beneficial for not only P&G and Gene Logic but, more importantly, our current and prospective GeneExpress(R) subscribers as well."

### Gene Logic Overview

Gene Logic Inc. is a leading provider of genomic information, enabling the discovery and development of pharmaceutical, biotechnology, health care, and life science products through the systematic and industrialized application of genomics and bioinformatics.

Gene Logic has built and is commercializing the world's most comprehensive survey of gene expression in human and animal tissues. Gene expression, which is the degree to which genes in a cell are switched on or off, or regulated, is information critical to understanding the functions of genes.

Gene Logic markets two types of gene expression database products to the global pharmaceutical, biotechnology, health care and life science industries: its custom databases and related software products and the GeneExpress(R) Suite of databases.

The GeneExpress(R) Suite can be used to discover and validate novel drug targets, develop and prioritize therapeutic compounds and facilitate clinical trials and patient management. Today, a number of pharmaceutical and biotechnology companies uses Gene Logic's various gene expression products for drug discovery, predictive toxicology and diagnostic applications.

For more information about Gene Logic, visit the company's Web site at [www.genelogic.com](http://www.genelogic.com) or telephone toll-free on 1-800-GENELOGIC.

### P&G Overview

Procter & Gamble Pharmaceuticals is a part of Procter & Gamble Health Care, a division of The Procter & Gamble Corporation. In prescription drugs, P&G is focusing on musculoskeletal and cardiovascular health, as well as anti-infective therapies.

Some of P&G's leading prescription products include Actonel(R) (risedronate sodium), Didronel(R) (etidronate disodium), Asacol(R) (mesalamine) and Macrobid(R) (nitrofurantoin monohydrate/macrocrystals).

All statements in this press release that are not historical are considered forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding Gene Logic's "expectations," "beliefs," "goals," "hopes," "strategies," or the like.

Such statements are subject to risks and uncertainties that could cause actual results to differ materially for Gene Logic from those projected, including, but not limited to, risks and uncertainties relating to technological approaches, product development, production, market acceptance, cost and pricing of Gene Logic products, utility of genomic information in drug discovery and development, dependence on collaborative partners, sole source suppliers, competition, ability to sign new subscribers, customer renewals and terminations, intellectual property of Gene Logic and others, and patent protection and litigation.

These and other risk factors are discussed in Gene Logic's Annual Report on Form 10-K for the year ended December 31, 1999 and Gene Logic's other SEC reports, including its Quarterly Reports on Form 10-Q.

Gene Logic expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in Gene Logic's expectations with regard thereto or any change in events, conditions, or circumstances on which any such statements are based.

--30--SF/ph\*

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## Gene Logic Reports Preliminary Fourth-Quarter and Year-End 1998 Results

GAITHERSBURG, Md. - March 8, 1999 - Gene Logic Inc. (Nasdaq:GLGC) had revenues of \$4.6 million in the fourth quarter of 1998, compared to \$1.3 million reported for the fourth quarter of 1997 and \$2.7 million for the third quarter of 1998. Revenues for the year ended December 31, 1998, were \$13.2 million, versus \$2.0 million in 1997.

This increase in revenues was the result of the addition of new collaborative agreements and the expansion of existing collaborations. The company had two collaborators when it went public in November 1997; it now has agreements with nine major firms, including five of the top 20 pharmaceutical companies.

"We are in an excellent position for further revenue growth," said Michael J. Brennan, M.D., Ph.D., Gene Logic's Chief Executive Officer. "We expect 1999 revenues to exceed 1998 revenues based on our existing agreements alone. Beyond that, we are in discussions with several potential new collaborators. And later in the year, we plan to launch the first of our new GeneExpress® databases."

Announced in January 1999, the GeneExpress product line will consist of a set of databases of gene expression in a wide range of healthy, diseased, and drug-treated tissues. The company is in the process of building the first of these databases, using Affymetrix Inc.'s GeneChip® probe arrays.

Preliminary operating expenses in the fourth quarter were \$7.9 million, versus \$4.1 million for the comparable period in 1997. Preliminary operating expenses for the year were \$24.2 million, compared to \$9.9 million in 1997. The increase in operating expenses was attributable to expansion of the company's target discovery and bioinformatic software businesses and development of its Flow-thru ChipTM microarray device.

The company had a preliminary fourth-quarter net loss of \$3.1 million, or \$0.16 per share, compared to a net loss of \$2.8 million, or \$0.43 per share, during the same period in 1997. The preliminary net loss for the year was \$9.3 million, or \$0.59 per share, versus \$8.5 million, or \$3.97 per share, in 1997.

The expense and loss numbers are preliminary because they do not include amortization of goodwill in the fourth quarter or a third-quarter charge for in-process research and development obtained through the acquisition of Oncormed Inc. As reported in its Form 10-Q for the third quarter of 1998, Gene Logic allocated \$35.2 million of the purchase price of Oncormed to in-process R&D. This write-off was based on a valuation provided by independent appraisers made in accordance with the standards of the Securities and Exchange Commission in effect at the time.

The SEC has recently made announcements regarding a new interpretation of these standards. Gene Logic is in discussions with the SEC to determine the impact of this new interpretation on the accounting treatment of the Oncormed transaction. The company may be required to reduce the amount allocated to in-process R&D and restate its third-quarter financial results. Once this issue has been resolved, the company will release full financial results for the fourth quarter and full year 1998. Any restatement will have no impact on revenue, cash flow, cash position, or any other fundamentals of the operations of the company.

### Review of Fourth-Quarter Milestones

During the fourth quarter, Gene Logic expanded its collaborations with three companies. It enlarged its relationship with Procter & Gamble Pharmaceuticals to include development of a gene expression database for drug target discovery for osteoporosis. It broadened its collaboration with Japan Tobacco Inc. to include development of an expression database for target discovery for an undisclosed major disease. And it extended its agreement with Rhône-Poulenc Rorer Inc., under which Gene Logic is conducting genetic analysis of tissue samples from clinical trials.

In December, the U.S. Patent and Trademark Office issued Patent Number 5,843,767 for the Flow-thru Chip, which may have broad application in drug discovery, genomics, and proteomics (the molecular characterization of an organism's proteins). Gene Logic holds exclusive, worldwide rights to this patent under a license from Oak Ridge National Laboratory.

Gene Logic combines genomic technologies and bioinformatic expertise to provide pharmaceutical companies with products designed to reduce the time, cost, and risk associated with drug discovery and development. These products include proprietary databases of gene expression for drug target discovery and toxicology, a novel screening technology for identifying new drug leads, and a pharmacogenomic technology for improving drug effectiveness. The company's Data Logic division, based in Berkeley, Calif., develops and markets bioinformatic software for managing and integrating genomic data.

Gene Logic has established alliances with Wyeth-Ayerst Laboratories, a division of American Home Products Corp.; Procter & Gamble; Japan Tobacco; NV Organon, a unit of Akzo Nobel NV; Rhône-Poulenc Rorer; Schering-Plough Corp.; Merck & Company Inc.; and Hoechst Schering AgEvo GmbH, one of the world's largest agricultural product manufacturers. The Data Logic division has a collaborative agreement with SmithKline Beecham PLC, under which it is installing its bioinformatic software to enable that company to build proprietary genomic databases and integrate them with information from public databases.

This press release contains forward-looking information, including statements about expected revenue growth, potential new collaborations, marketing of a new gene expression database, and the SEC's review of the third-quarter charge for in-process R&D. Such statements reflect management's current views of future events. Actual results may differ materially from these projections because of a number of risk factors, including uncertainties associated with competition, technological advances, the company's ability to enforce its intellectual property rights, the impact of the intellectual property rights of others, and the company's reliance on collaborators for development and commercialization of products that may result from discovery programs. There is no assurance that collaborations will continue or be renewed or that revenues will continue to grow. The success of the new database will depend in part on the ability of Affymetrix to supply adequate quantities of high-quality GeneChip arrays. If Gene Logic is required to reduce the amount allocated to in-process R&D in the third quarter, there will be a corresponding increase in goodwill that will result in accounting charges against future earnings.

These risk factors and others are more fully described in the company's Annual Report on Form 10-K for the year ended December 31, 1997, the Form S-4 filed in connection with the Oncormed acquisition, and other documents filed with the Securities and Exchange Commission.

For the company's fourth-quarter conference call, dial 800-633-8755 in the United States and Canada or +1 212-346-0190 elsewhere at 8:55 a.m. EST, March 8. For a replay of the call, dial 800-633-8284 or +1 619-812-6440 between noon, March 8, and noon, March 10. The reservation number is 11921358.

The company's fourth-quarter conference call can be accessed on line at <http://209.67.65.42/ccall/glgc/q498.ram>.

Financial tables follow.

GENE LOGIC INC.  
PRELIMINARY CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS  
(In thousands, except per share data)

|  | Three Months Ended          |                | Twelve Months Ended         |                 |
|--|-----------------------------|----------------|-----------------------------|-----------------|
|  | December 31,<br><u>1998</u> | <u>1997</u>    | December 31,<br><u>1998</u> | <u>1997 (2)</u> |
|  | (unaudited)                 |                |                             |                 |
| Revenues   | \$4,580                     | \$1,274        | \$13,197                    | \$2,047         |
| Expenses   |                             |                |                             |                 |
| Research and development                         | 5,371                       | 2,723          | 16,605                      | 6,061           |
| General and administrative (1)                   | 2,561                       | 1,383          | 7,552                       | 3,826           |
| Acquired in-process research and development (1) | -                           | -              | -                           | -               |
| Total expenses                                   | <u>7,932</u>                | <u>4,106</u>   | <u>24,157</u>               | <u>9,887</u>    |
| Loss from operations                             | (3,352)                     | (2,832)        | (10,960)                    | (7,839)         |
| Interest Income, net                             | 317                         | 390            | 1,844                       | 745             |
| Other Expense                                    | -                           | -              | (80)                        | -               |
| Income Tax Expense                               | (100)                       | -              | (100)                       | (100)           |
| Net loss   | <u>(3,135)</u>              | <u>(2,442)</u> | <u>(9,296)</u>              | <u>(7,194)</u>  |

|  |          |          |          |          |
|--|----------|----------|----------|----------|
| Accretion of Mandatory Redemption Value of Preferred Stock           | -        | 377      | -        | 1,286    |
| Net loss attributable to common stockholders                         | <u> </u> | <u> </u> | <u> </u> | <u> </u> |
| Basic and Diluted Net Loss Per Common Share                          | <u> </u> | <u> </u> | <u> </u> | <u> </u> |
| Shares Used in Computing Basic and Diluted Net Loss Per Common Share | <u> </u> | <u> </u> | <u> </u> | <u> </u> |

**SELECTED CONSOLIDATED BALANCE SHEET INFORMATION**  
(In thousands)

|  | December 31, |             |
|--|--------------|-------------|
|  | <u>1998</u>  | <u>1997</u> |
| Cash, cash equivalents and marketable securities | \$30,982     | \$46,621    |
| Working capital                                  | 26,577       | 42,455      |

(1) For the quarter and twelve months ended December 31, 1998, excludes expenses related to the Oncormed acquisition.

(2) Numbers in column do not add up precisely due to rounding.

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